Review of Secondary Programs

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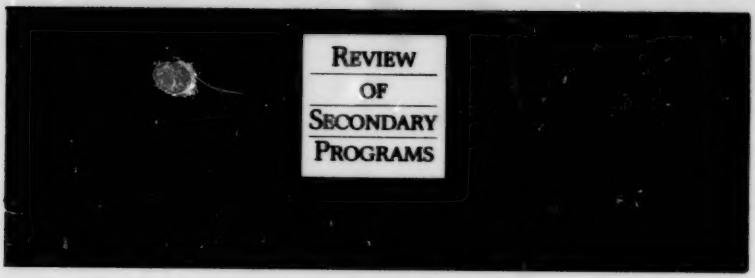

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The content of this document summarizes the information contained in the following studies commissioned by Alberta Education:

Butt, Richard. *Pioneering the Future: Educational Implications and Policy Directions for Alberta Secondary Schools.* The University of Lethbridge, July, 1984.

Lawson, R.F., and Stevenson, Barbara. *Comparative Studies Project.* The University of Calgary, June, 1984.

Mitchell, John J. *The Alberta Secondary Student: Some General Growth Profiles.* The University of Alberta, June, 1984.

Sheehan, Nancy M. *Educational Developments, Societal Conditions and the Secondary School Curriculum in Alberta: An Historical Overview.* The University of Calgary, June, 1984.

A large number of documents from a variety of sources were consulted during the Secondary Education Review. These publications are listed in Appendix A.

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PART I

In February 1984, the Honourable David King, Minister of Education, initiated a review of Alberta's secondary education program. Information was sought from a variety of sources to form a broad knowledge base from which to assess current concerns in education and upon which to establish principles for revising the secondary education programs.

The views and concerns expressed by Albertans are summarized in a companion document, *Alberta's Secondary Education Program: The Public's View*. In addition, educational input was collected, analyzed and summarized from selected reports published by Alberta Education and other Canadian agencies. Significant documents on current education reform in Canada, in the United States and in Europe were perused, including books recently published. A list of the materials reviewed are included in Appendix A of this document.

In addition, four studies were commissioned by Alberta Education, which would address issues relevant to the review. These studies are:

Educational Developments, Societal Conditions and the Secondary School Curriculum in Alberta: An Historical Overview, by Dr. Nancy Sheehan, The University of Calgary.

The Alberta Secondary Student: Some General Growth Profiles, by Dr. John J. Mitchell, The University of Alberta.

Comparative Studies Project, by Dr. Richard F. Lawson, The University of Calgary.

Pioneering the Future: Educational Implications and Policy Directions for Alberta Secondary Schools, by Dr. Richard Butt, The University of Lethbridge.

This booklet summarizes the content presented in these studies. For groups and associations interested in pursuing a more detailed analysis of these studies, limited copies of the original documents are available upon request.

This section summarizes the contents of *Educational Developments, Societal Conditions and the Secondary School Curriculum in Alberta: An Historical Overview,* a paper prepared by Dr. Nancy Sheehan.

The Early Years

In 1905, Alberta inherited a school organization, a program of studies and a financing arrangement from the Northwest Territories. A locally elected board of trustees was responsible for building, equipping and operating the school. Its curriculum, textbooks, inspectors, examinations, as well as teacher training and certification were centralized under a minister in the Department of Education. The program of studies was academic, bookish and memory-orientated.

A booming economy during the first decade enhanced by record wheat production and sales meant a rapid increase in population resulting in a need for services. Changes before 1920 were minor but societal pressures were beginning to influence the schools: Greek was added in 1912 at the request of The University of Alberta; high school cadet corps were established; agricultural schools were opened by a government that needed the farmers' vote, and because it was felt that homesteaders did not farm efficiently; vocational and technical courses were added as the economy developed and diversified. In addition, an already small high school enrolment was further reduced by students enlisting in the war or doing much-needed farm work. The Department of Education lowered the pass mark to 25 per cent in any subject for these students; in effect, giving academic credit for practical, unrelated experience.

These changes, as well as international developments and the belief that the curriculum concentrated on aspects unrelated to life, brought about a review of the program of studies. In 1923, recommendations were submitted in a final report, and included fewer subjects and passing by subject rather than by grade to try to reduce the high failure rate in provincial examinations. Diplomas in general, agricultural, commercial and technical education were added to the matriculation and normal school entrance diplomas. This multi-diploma program, which was to provide for the academically disinterested student and to supply trained personnel for the industrial sector, did not meet with success. In 1935, twelve years later, only 181

of 2,458 graduates received other than the matriculation or normal school entrance diplomas. Among the several reasons for this was the prestige associated with the more academic programs as well as the lack of offerings in small schools.

Another secondary education review took place toward the end of the twenties. No major changes were recommended and, therefore, high school programs remained academic and controlled by the departmental examination requirements. And yet, the world outside was changing. No longer a pioneer society, Alberta, like the rest of Canada had survived and matured during the war. Prohibition, the extension of the vote to include women, development of labor unions, the discovery of oil, the extension of radio, farm mechanization, improvements of highways and a trend toward urbanization had very little immediate impact on the school curriculum.

The 1930's: Depression, A New Government and Major Reform

The school and its curriculum were affected by the economy. The worldwide recession, the stock market collapse and agricultural failure triggered the depression of the thirties. Migration from the rural areas reduced the population supporting rural schools; lack of jobs kept students in school longer; money was lacking for resources, teachers and buildings. More students were taking academic programs that were thought to be impractical by many.

In addition to societal developments, psychology, testing and measurement, and curriculum theory with an emphasis on the needs, interests and abilities of the learner, influenced the curriculum committee of 1934. These influences were reflected in the committee's recommendations which spurred wholesale educational reform, particularly following the election of the Social Credit government in 1935.

A major organizational change brought about a two-tier secondary school system. Instead of a four-year high school, a three-year junior high school followed by a three-year senior high school developed. The dual role of the junior high school was to prepare some students for entry into senior high school and others to leave school with a sense of accomplishment. A required core of subjects for all students was proposed, with elective subjects to be available according to individual interests and aptitudes. The electives would fall into three categories: cultural appreciation, such as music, art or craftwork; exploratory courses to assess the personal resources of students, such as shop, home economics, typing, commercial art; and pre-vocational courses especially for those not proceeding beyond junior high school.

A one-diploma senior high school program with a required core of courses and a wide choice of electives on a credit system basis was introduced. It was believed that removal of examinations at the end of Grades 10 and 11 would permit students of varying interests and

abilities to obtain a diploma. It would allow all sizes of high schools to offer some non-academic options. In effect, academic and non-academic subjects would become a part of every student's package. Because of the choices which students had to make, it was felt they needed counselling. Therefore, the curriculum committee recommended in 1938 a course to provide guidance in problems of adolescent personality and vocational orientation. In addition, it approved a proposal to make the teaching of oral and written English the responsibility of all teachers.

These changes, along with the change from districts to divisions and the recognition of the Alberta Teachers' Association, had the potential to improve secondary school offerings throughout the province. However, to achieve this would have required better trained teachers and better facilities and, even in the urban areas, these requirements were difficult to meet. The academic nature of the school remained uppermost. This was for a variety of reasons, one of which was that traditional subjects required less in the way of space, resources and equipment than did the newer subjects. In addition, perhaps, parents and children sought the financial security of the professions and white-collar jobs which required academic, rather than vocational, courses.

The 1940's and 1950's: War, Reconstruction and a Royal Commission

Again, the outbreak of war affected the school and curriculum. Although the economy improved bringing the potential availability of more money for education, the effects of the war were not so positive. Resources and equipment for technical and vocational programs were unavailable and construction of regional/composite high schools was curtailed because of a lack of manpower and materials. In addition, students and teachers were leaving for other readily available jobs or to help in the war effort.

Curriculum planners were caught in a tough situation. For the new program to be successful, a broad range of courses and more instructional time were needed to create meaningful experiences that would acquaint students with the realities of life. Besides the lack of well prepared, experienced and progressive teachers there was little time for school social activities, guidance or student counselling. Study groups were set up to revise currcula and to plan school programs for democratic living in a democratic manner. One of the results of these studies was a proposal, never put into effect, recommending the addition of a fourth year to the senior high school program because it was thought that the English and social studies programs really required four years. As well, the extra year would allow time for more adequate training in the democratic processes through "social living, more physical and social activities and more opportunities for experience rather than mere knowledge" (Annual Report of the Department of Education, 1943, p. 15-17).

The curriculum work of the forties did not produce fundamental changes and the revisions were not very successful. The high schools generally failed to provide technical, vocational programs. Often, elective courses became compulsory because of a lack of optional subjects. Agriculture courses were not available in an agricultural province. Despite an increased high school enrolment, a one-diploma program, regional and composite high schools and a philosophy that included education for democracy, Sheehan concludes that the academic program continued its tight rein on the system.

In the fifties, schools had a difficult time finding space, teachers and courses as the 'baby boom' children reached school age, while immigration and industrialization increased. The launching of Sputnik by the Russians confirmed the public's belief that schools in North America, including Alberta, were inadequate. A Royal Commission on Education, the Cameron Commission, was appointed to assess the situation. The majority of comments to the commission concerned the curriculum and its perceived lack of intellectual rigor. That only six per cent of high school students proceeded to university while every high school had to offer the matriculation package was seen as a problem. In addition, although 110 subjects were authorized for students, choice was limited by the requirements of university faculties and the size of the high school.

Emphasis on mastery of information, specified content and examinations to counteract progressive educational ideas, were suggested by the commission. The school's role in manpower training was another focus of the Cameron Commission's recommendations. The industrial needs of society and the trend toward more students going to high school resulted in suggestions favoring specializtion in fine arts, business education and many vocational fields. Another recommendation called for a study of the school year structure, in particular the semester system, to facilitate serving the large and varied post-war student population, and the year-round use of physical facilities.

The 1960's and 1970's: More Money, More Students, More Programs

The sixties was a decade of prosperity and change, a decade of youth and of rights movements, a decade of changing moral and sexual standards. It was a time of unconventional behavior, of rebellion against accepted norms, traditions and authority. Progressive theories stressing process rather than content, understanding rather than facts, flexibility rather than rigidity, which had been introduced in the thirties and forgotten in the forties and fifties, became the educational watchwords of the sixties.

Change was evident in the attitude toward education's role in society. The private sector's cry for better trained workers and the government's need to relieve unemployment and to expand the economy resulted in funds for technical and vocational training. An

abundance of resource material became available. Composite high schools with large vocational components were built and their offerings expanded to meet the needs of the changing and varied student population. Programs in as many as twenty-four fields were introduced. Schools adopted the semester system to suit their own needs without, however, implementing the proposal of year round schooling. There was a wide range of specialized teachers in commercial, vocational and agricultural areas, as well as teachers for the handicapped.

Finally, three decades after the high school revision of 1936, the province really began to provide a high school education for students not academically inclined or interested. School courses and programs began to reflect and to be structured toward the many career opportunities and possibilities of the Alberta of the 1960's.

In the 1970's, Alberta society had become increasingly complex and many Albertans were of the opinion that its institutions were crumbling. The unconventionality of the sixties, the rebellion against authority and traditional values, as well as the increasing rate of marital breakdown, drugs and alcohol consumption, and rising crime statistics caused concern. A booming economy, a rapidly increasing and more diverse population, as well as changing technology, produced an unstable society.

As society began to experience anew the stress of change, the schools were blamed for having contributed to the problems by not maintaining a more traditional structure. However, the schools were receiving conflicting messages. There was pressure on the schools to solve the ills of society, particularly to restore lost traditional values. On the other hand, money was available to try out new ideas which advocated individuality and freedom and which questioned traditional courses and methodology. Young people were caught between the adults' nostalgic yearnings for traditional values and society's growing secularization and emphasis on materialism as wealth and urbanization increased.

The burden of responding to the need to restore stability to this multicultural and diverse society fell especially on social studies. A values-oriented curriculum was introduced to help students develop a set of values, learn how to make decisions and how to make the future world a more ideal place in which to live. Not taken into consideration was the wisdom of charging one course and one age group — our youth — with the responsibility for correcting the perceived wrongs of a turbulent era. In fact, a course devised as a means of re-establishing traditional values appeared to many to be doing just the opposite.

The Alberta of the 1970's was a vastly changed province from the one upon which the Cameron Commission of 1959 was based. Another commission, chaired by Walter Worth, published its report (*A Choice of Futures*) in 1972, reflecting the changing social and economic climate of the sixties as well as the more sophisticated trends in educational development. Specialized schools, variety in programs,

parental involvement and student advisory councils were some of the report's suggestions. To allow more room for individual growth, and to reflect educational research advocating the skills of critical analysis and synthesis for students, departmental examinations came into disfavor. It was thought that better educated teachers could assess their students more accurately and fairly. Expo 67, the Quebec crisis, and a resurgence in nationalism, were reflected in the pleas for more Canadian content, for bilingualism and for a multicultural emphasis, particularly in Alberta. The right of all students to equal educational opportunity was demonstrated most noticeably by the entry of students with handicaps into the mainstream of the school.

With a wide variety of courses, options and programs to choose from, with provincial examinations no longer required, with student and parent dialogue a part of the process, with less stress on factual knowledge, with a high school curriculum that had something for everyone, and school plants that used all the technology that society had developed, the schools of the seventies were vastly different from their counterparts of preceding generations.

Conclusion

With the bloom off Alberta's economy, the eighties brought different challenges to the schools. Concern for the traditional values once again surfaced. The quality of education was questioned by business, by the universities and by the public in general. A "back to the basics" movement had begun. The province began re-introducing departmental examinations, while the universities developed writing tests for incoming students.

Looking back over the past century, a distinct pattern emerges that links societal change and developments in educational research to modification in the school curriculum. Over the course of eighty years, schools have changed. No longer are they academic, intellectual institutions preparing students for entrance to universities and professions and appealing to a small proportion of the population. They now consist of programs in diverse areas preparing a broad spectrum of youth for the workforce, for a variety of post-secondary institutions, as well as for living in a complex society. Larger numbers are attending and staying in school longer. At the same time, schools are providing education in areas previously the responsibility of other institutions such as the church and the family.

However, in spite of all the reforms and reform efforts, Sheehan believes that the comments made by Theodore Sizer on American education are valid generally for Alberta. Sizer states that as an organization the high school has changed little over the century: students are grouped by age; content is organized by departments; the primary methodology is the lecture; the school year is from Labour Day to mid-June; and accomplishment is measured in terms of credits earned and time spent. Sheehan notes that around the academic core the secondary school curriculum has added courses to satisfy the

demands of a broader proportion of the population but these continue to be delivered in much the same manner as over the years. The program with the most prestige, the program that is the centre of most secondary schools, and the program that attracts the bright, upwardly mobile student and parent continues to be the matriculation program. This perhaps suggests that despite pedagogical developments and social, political and economic changes, the secondary school curriculum has exhibited a stubborn continuity with its academic core.

However, society and the purpose of the high school have changed because besides educational activities, there is now a sociological focus in the school. These two functions vie for attention and are often at odds with each other. As Sheehan concludes, "The challenge to reformers is to reconcile the educational and social roles of an institution serving a widely different population in terms of abilities and backgrounds, and to prepare that population for both today and for the unknown of tomorrow" (page 24).

PART

III

This section is a summary of the paper on adolescents commissioned by the Secondary Education Review and prepared by Dr. John J. Mitchell. This paper, *The Alberta Secondary Student: Some General Growth Profiles*, portrays the commonalities which adolescents share with one another. Studying the general traits shared by youth can help us to understand the general abilities found at certain ages, to predict trends in behavior, and to estimate the limitations of certain groups.

The adolescent period served by secondary schools can be divided into two periods, early and middle adolescence which broadly correspond to students in junior and senior high school programs. Early adolescents straddle the worlds of childhood and adolescence, sometimes thinking as one and then as the other, sometimes feeling as one and then the other. They alternate between being children and being adolescents. Middle adolescence, on the other hand, is that period when young people, no longer feeling the pull of childhood, prepare to enter into adulthood.

Early Adolescence

Early adolescence is for most youth a period of development and physical change, marked by significant growth patterns. Neither children nor as yet fully developed adolescents, students in this age group (Grades 7 to 9) are particularly sensitive and vulnerable as they try to come to terms with changes in roles and status during the transition from childhood to adolescence. These changes, occurring as they do in the first half of secondary school life, are not without their attendant stresses.

To assess the impact of stress during this stage of transition it is important to distinguish between *profound* and *non-profound* stress. Profound stress, when sustained over a period of time, results in self-destructive symptoms, in exaggerated use of defense mechanisms, in neuroses, or even psychoses. Non-profound stress, on the other hand, is not debilitating, even when sustained over a long period of time.

Some of the more significant growth trends are the rapid physical changes and the rise of new emotions which have a marked affect on these students, changing the happy pre-adolescent into a moody, unresponsive youth for whom life has become a burden. Sensitive to criticism, yet needing the acknowledgement and acceptance of peers

and adults, this is a particularly stressful time, the effect of which impacts on other emotional areas: if early adolescents do not get positive affirmation from outside sources, self-doubt is increased. This poor self-image nourishes fearfulness and produces stress; this stress, in turn, causes anguish, irritation and inconvenience; it disrupts friendships and sometimes family unity. These examples of non-profound stress are symptoms of a difficult stage of growth rather than manifestations of future neuroses.

Human sexuality falls into the low stress category, largely because immaturity affords protection against many of its frustrations. The anxiety of a lover's quarrel, or the pain of romantic rejection are rarely experienced in the early adolescent community.

The stress which comes from responsibility is comparatively absent because youth of this age do not have much responsibility. The intellect is not fully developed, so that the meaning and purpose of life is not yet seriously questioned. The seeming futility of life, perhaps the most powerful precurser to adolescent suicide, is not strongly felt during early adolescence. Likewise, alcohol and drug abuse are less common than in later adolescence.

Intelligence is blossoming but it is not as sophisticated as the youngsters themselves believe it to be. The ability to make sound judgments and to be detached from selfish interests is not fully developed. Youth of this age are all in school, therefore their lives revolve around school and its environs. They are *easy* to teach because they believe in the power of authority; their thought processes are geared to assimilate rather than to analyze, and they have a limited ability to disagree with ideas beyond their experience. Conversely, however, they are *difficult* to teach because they think they know more than they do, because they question better than they understand, and because their powers of induction are still weak when compared with older adolescents.

Early adolescents are more social than philosophical, more impulsive than reflective, more experimental than cautious. Their concerns are immediate rather than distant. They are not naturally cooperative, but they are capable of genuine sharing — under the right conditions. Their sense of self is not well-defined because they are in the process of discovering their likes and dislikes, as well as their strengths and weaknesses. Their morality is based more on what they have absorbed from their culture rather than from thoughtfully developed principles. Their conscience is more pragmatic than ideal and more egocentric than altruistic.

Any overview, however brief, of the commonalities which adolescents share with one another would be incomplete without a reminder that early adolescence is only the beginning of the teen years. There is no sharp divider separating this group from that of secondary students in Grades 10, 11 and 12, the middle adolescent group. These ages have considerable overlap. For example, many youngsters in Grade 9 are, in most respects, middle adolescents rather than early adolescents.

In summary, early adolescence is a period of abundant stress, but essentially of the non-profound variety. The vast majority of youngsters accommodate rather well to the storm and stress of this age.

Middle Adolescence

Middle adolescents are more socially mature, have greater self-discipline, are generally more selective in their choice of friends, better at avoiding self-defeating relationships, and relate better to the opposite sex. There still exists a strong need for the group togetherness or affiliation they experienced as early adolescents to prevent loneliness and isolation.

There is a sharp increase in pregnancies during this period as these middle adolescents become more sexually aware. The uncertainty of their social network adds pressure to an already difficult time of life, resulting in periodic outbursts of self-assertion.

It is during the period of middle adolescence that intellectual abilities achieve their greatest effectiveness. Adolescents can now examine all aspects of an issue and deal with the abstract and theoretical. They are interested in the ideal and in life and death issues. They can investigate ideas beyond reality as presently understood. Because of the increased ability to create and examine possibilities, adolescent political thought undergoes important changes. Their increased intellectual ability allows them to consider future possibilities and to assess the plausibility of options in making decisions which will influence their future.

They can apply their new powers to their own thought processes. This results in more precise thought and the detection of errors. However, it also encourages self-doubt as they examine ideas from more than an egocentric point of view. Therefore, these more mature mental processes which permit scientific thought at the same time introduce the anguish of self-analysis. The more accurate self-assessment reveals weak or hidden parts of the personality, creating stress, especially for those who are low in ability or social attractiveness.

Although youth generally come to a realistic acceptance of their limitations, for some it deteriorates into a form of self-pity. They hate the society which undervalues them. Since the adolescent emotions become stronger, sorrow, jealousy, anger and hatred, add to the stress of this period. This increased stress can lead to all forms of self-destructive behavior which escalates during middle adolescence. Suicides, homicides, and physical assaults increase as do deaths from accidents. Drug-related deaths, from overdoses and suicides while under the influence of drugs or the depression induced by drugs, also rise. The more severe illnesses such as depression, schizophrenia and paranoia are more frequent than in early adolescence. Mitchell believes that generally one can say of the Alberta secondary student: as age increases so also does the incidence of virtually all forms of serious emotional disturbances.

This is a critical time for adjustment to school. Youth for whom school is not socially rewarding or for whom learning does not improve job prospects tend to drop out. Those for whom it offers social rewards and provides credentials for future success rarely drop out.

In summary, the middle adolescent has become an individual with more idealistic, more theoretical and more sophisticated thought processes, producing a greater need for freedom and choice in decision-making. These thought processes permit introspection producing a more realistic self-evaluation. However, this may lead to excessive self-doubt and emotional disturbance. Changes in socialization allow greater self-autonomy, more complicated relationships with the family unit and increased interest in the opposite sex.

Adolescent Needs

The satisfaction of the emotional and psychological needs of this period is fundamental to the healthy human development. Adolescents are future-directed and therefore, filled with hope for the life that lies ahead. They require a certain amount of order, certainty and security in their world so that they can feel reasonably certain of fulfilling their aspirations. From this "safe" position, they can seek new ways of satisfying their needs, while being able to judge what will likely occur as a result of certain behavior. Adolescents maturing into adulthood want to have the freedom to make choices and to experience the results of those choices. This need to exercise choice, to enlarge the range and quality of satisfaction, is the forerunner of maturity and self-actualization in adults.

All human beings, as social individuals, have a strong need for acceptance in and of themselves by others, regardless of their achievements. Adolescents, not sure of themselves, have a particular need to experience this acceptance as well as their own identity, integrity and worthwhileness. When society offers little hope for meaningful participation and involvement, this need is frustrated.

Adolescents have the capacity and the desire to make choices. In addition, they require freedom to exercise these choices.

Adolescents seek some value or belief system, to which they can commit themselves. Some psychologists believe that serious consequences result from the absence of a system of values.

Although adolescents' ability to analyze the moral implications of behavior would make this an appropriate time for courses in interpersonal development and moral decisions, schools continue to focus on academic subjects.

The fundamental needs of adolescents are those which integrate the diverse elements of human nature so that as an individual, each adolescent can be counted on to contribute to the requirements of society while maintaining purpose and direction within self.

Adolescents, like adults, can satisfy their personal needs only when their behavior contributes to the satisfaction of the needs of others. However, as Dr. Mitchell indicates, secondary schools, in their present format, isolate students from the larger community, preventing them from making meaningful contributions to society.

PART

IV

This section gives a brief overview of Dr. Lawson's final report, *Comparative Studies Project, Part 2: Interpretation Report.* In assessing the applicability of educational practices in other countries, Lawson warns that we must be careful to distinguish between aspects which are potentially useful to Alberta and those which are not transferable. Objective and value choices made by various countries may represent universals common to all cultures or they may be based on the unique needs of a particular society. Those based on the uniqueness of a particular area are not applicable to Alberta while those which are universal or have a common base of experience in our culture may be of use.

Choice of areas to be studied was based on the relationship to Canadian educational traditions as well as noteworthy or innovative methods or structures at the secondary level. Countries selected include the United Kingdom, The Federal Republic of Germany, The German Democratic Republic, Japan, Sweden, France and the Soviet Union. Together they give a comprehensive picture of secondary education in industrialized countries.

The American states were selected following review of educational documents and consultation with educational agencies in the United States. These were California, Maryland, Minnesota, Texas and Alaska.

Secondary Education in Selected European Countries and Japan

In general, the educational systems of the countries studied have a shorter elementary level than Alberta's with a longer intermediate (junior high) level which has a broad and comprehensive curriculum. The upper secondary level (senior high) has a diversity of programs, but it is not compulsory in most of the countries studied.

Current trends in curriculum include treating mathematics and science as dynamic subjects with changing content. These subjects are supplemented with technology at the upper secondary level and languages at the lower level. There is a strong emphasis on study of the native language, as well as one or more foreign languages with emphasis on fluency and use. An accent on aesthetic and practical studies is increasingly evident, sometimes in special schools. This is in agreement with the increased acceptance of the secondary school's

responsibility for personal and social development as well as for occupational preparation.

Value teaching tends to be handled through the teaching of religion or moral education or the involvement of youth in extracurricular social and productive activities with ideological direction.

Private schools vary in their purpose across the systems studied. In general, the stronger the commitment to public education, that is, to respond and change according to public need, the weaker the place of private schools. Alternatives are generally built into the public system through program options, extracurricular provisions or schools with special emphasis.

Clearly the area of greatest activity and change in the countries studied is that of vocational and technical education. There is some vocational-technical instruction in the secondary level everywhere and it is accepted as an area of general education. In East European countries a vocational or work orientation is present in the entire system. Expansion in these areas is common throughout all the countries studied. There is liaison between the school and industry with efforts at joint authority and public responsibility for vocational and technical training and relating it to the work place. Alternating periods of work and studies are becoming acceptable. What emerges as the dominant pattern is a varied but egalitarian system with a closer work-school integration, involving other agencies and alternating through school and non-school periods with a shift from the traditional priority of subjects. There is improved articulation of vocational systems as well as return and extension possibilities for working youth and adults.

There is however, no drop in standards or in required content of courses. In countries studied, there appears to be a higher demand than in Canada, both in length of schooling time and in actual content of the curriculum. At the end of the secondary level, school marks or social behavior assessment may be included but standard examinations continue to be the main criterion for access to higher education or university in most countries.

With greater expectations in vocational and technical education, inservice opportunities for teachers have increased and in some cases have led to new institutional branches such as Japan's College for Inservice. Competency reviews are a regular procedure in some countries. In addition, efforts are being made to improve teacher education programs and the selection of teacher candidates.

In some countries, planning for change is done centrally, but others place greater emphasis on local involvement. However, all seem to rely to a great extent on professional expertise in planning and interpreting policy or translating central decisions into practice. The educational structure has a close link with the political structure of the nation but in all countries there is a common reinforcement of central authority as well as that of the local school and community. Authority

is clearly a watchword of the 80's, but so is openness to community and reliance on professional assistance for policy decisions.

Problems exist in all countries and it is obvious that the task of educational reform is formidable. Among the difficulties evident are the bureaucracy of existing administrative structures and increasing economic stringency while at the same time there is a greater need for more teachers for differentiated upper secondary levels. The relationship of general to vocational education and how to lower the traditional barriers to provide for subject replacement raises concern. In addition, incomplete arrangements exist for inter-provincial mobility of students in federal systems; and there is actual disparity in education as a result of local school autonomy.

Much of the reform discussion in these countries refers to flexibility and opening of opportunities. It is important to consider these trends against the backdrop of traditional rigidities and narrowly defined standards of European education.

Secondary Education in Selected American States

In the American states, one sees a diversity of efforts to cope with change in society. A striking aspect is the encouragement by the state through incentive funding for local initiatives such as curriculum development, community involvement, experimental delivery systems, inter-district programs, local school improvements, student achievement and teacher professional development. The efforts of some states to respond to multicultural needs by ethnic and foreign language policy merits consideration in Alberta. Other aspects of interest are the articulation between elementary and secondary schools and the required semester of computer studies for every high school student. Promotion of alternatives within the system, such as specialized high schools, curriculum clusters and business partnerships, meet individual needs and allow for institutional creativity. Because of this diversity, there is need for and a great emphasis on student counselling.

State leadership in the development of technology and the provision of teacher inservice opportunities as well as model plans to assist districts in their own planning is evident. Instructional priorities are determined with local input and there is an ongoing process of innovation. Research efforts focus on teaching effectiveness and new ideas in education.

Centrally regulated state planning with affirmation of the intellectual purpose of the high school and curriculum tightening indicate a hardening of achievement standards in some states. Considerations include proposing that the regular school day be devoted exclusively to academic work while the hours before and after be utilized for extra-curricular, remedial and community activities. In Texas, state-mandated competency based curriculum is spelled out in

detail with an exit test of objectives which every student must pass. Lawson believes that what may be recommended in effort, standard and optimism is countered by a procedure which appears unduly restrictive, potentially bureaucratic and likely to stifle professional initiative.

Wherever there is individual and school variation, the burden of success falls on teachers. The most rigorous and uniform standards of teacher education and certification before teaching as well as staff development before completion of credentialing apply in California and Texas. Proposals regarding teacher performance are stringent. Teacher education institutions are to undergo rigorous evaluations. There is legislation for standardized testing before entry into teacher education programs, and proficiency testing for teachers. Although these recommendations in such specific form appear to be restrictive and possibly regressive, some of the ideas regarding teacher proficiency testing, pre and inservice developments and career ladders for teachers may be appealing to the general public. In addition, Lawson belives that the proposal to attach a school to each teacher education facility may supply the missing link in present theory-to-practice training.

There are support activities for teachers to enhance mathematics and science teaching. These include inservice opportunities and education-business alliances. Service centres are provided for technical assistance in computers.

The study of education in Alaska revealed innovative attempts in outreach programs through electronic curriculum packages. The concept of small high schools with cultural as well as academic programs, although commendable in principle, poses serious problems of standards. However, the generosity of state funding, the pattern of community involvement, teacher professional development and the promotion of programs related to the geographic-economic situation of the state are to be commended.

In summary, current reforms in the selected areas tend to be conservative, emphasizing content and standards; they are egalitarian, attempting to reach and retain more youth, but in different ways; and they are practical, with indirect, but frequently direct economic reference. They affirm the intellectual purpose of secondary education. Other non-academic programs or extra-curricular activities are organized around the basic studies. Mathematics and science are treated as dynamic subjects with changing content. A strong literature and culture content in the study of the national language as well as foreign language study and the treatment of social sciences as one or more disciplines are of relevance to Alberta. Successful individual achievement appears to be related to personal discipline or behavior control, selectivity and known standards. There are opportunities for concentration on a vocational line of study in high school.

The least disturbing arrangement for alternative programs appears to be that of integrating them with existing programs or schools. Vocational-technical education is the fastest growing area, offering

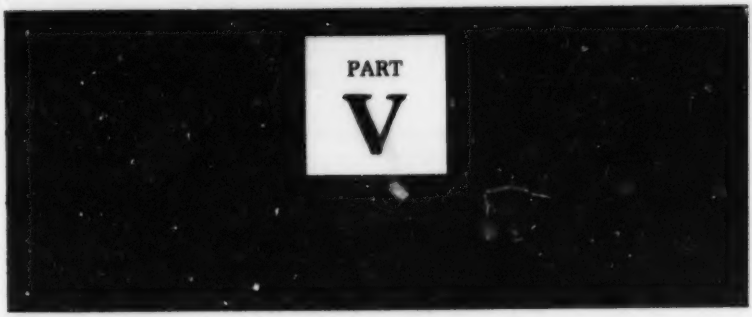
flexibility to encourage continuation of school for working youth. Joint responsibility by a variety of agencies, not just the school, for vocational education is developing.

The political contact points for current school reforms are the ministry as well as the local school or community. The modernized form of the inspectorate with highly qualified inspectors carrying information and assistance from the ministry may be a missing link in some countries. Broad community participation in planning and the availability of technical assistance are important. Establishing linkages between programs and between school and work appears to be one of the most important reform concerns.

All significant reform efforts uncovered in the study are supported by financial commitments on the part of governments. Funding, especially in the form of supporting local initiatives, appears to be most effective. Many of the systems studied carry out fundamental research into long-standing questions such as the disparity in achievement between the sexes and between different socio-economic groups.

The crucial role of the teacher in change and in the maintenance of quality education is recognized. The majority of systems are initiating some form of proficiency testing for certification, both initially and for renewal. Inservice opportunities for teachers, evaluation of teacher education programs, and entry requirements into teaching are a necessary corollary to certification review. Teachers' work conditions as well as their professional stature and responsibility in planning and implementing reform are important to the quality of education.

Lawson believes that long-range planning and innovations should be a combined effort of professionals in the government, the universities and the schools, along with the local community, and that the process of improvement should be continuous.



L.J. D'Amore and Associates Ltd. of Montreal were commissioned to prepare a report on *Images of the Future*. This report contains a consolidation of futuristic perspectives from a variety of sources. General images of the future, with specific implications for Canada, and in particular for Alberta, are elaborated. Emerging technologies in various areas are considered relative to the impact on the family, the office, the factory, the school and other societal institutions. The findings and conclusions of this futures study were then reviewed and validated by a group of specialists in appropriate fields such as economics, sociology, social psychology and demography.

Nine educators, representing a cross-section of educators in Alberta and a well known Canadian educator from McGill University, were selected to discern important issues and concerns that could be derived from *Images of the Future* and to enunciate the implications that these might have in developing a framework for secondary education in Alberta. This team examined *Images of the Future* and prepared individual papers for the secondary review.

Following subsequent discussions, views were synthesized in a report entitled *Pioneering the Future: Educational Implications and Policy Directions for Alberta Secondary Schools* authored by Dr. Richard Butt of the University of Lethbridge. Dr. Butt's report is summarized in this section.

Butt indicated that we need a vision of what we believe to be desirable and reasonable for the human family. Only then can we use human intelligence, will and creativity to cause that future to happen. An image of the future needs to be developed systematically through common participation. A positive and eclectic image of the future will need to be developed by local school communities to meet their own needs and interests within the context of a pluralistic and multicultural society. This will be an ongoing and continuous developmental process as needs and resources change. The spiritual and aesthetic aspects of existence are regarded as being essential to envisioning the future as well as to the belief and commitment needed to attain a preferred future.

Therefore, a desirable future would allow the utilization of knowledge and information, science and technology to improve the human condition. Harmony with the environment rather than its

destruction would result from lower levels of consumption, use of natural foods and of durable, repairable, adaptable, non-polluting and energy efficient products.

Alberta's economic picture would change from massive resource extraction to dynamic and flexible enterprises providing technological expertise, products and information to other nations. The emphasis for the individual would be lifelong education and work to develop literacy, autonomy and self-reliance. Human beings would be able to participate in determining their own future. Greater self-reliance would counteract the alienation being experienced today. While individual efficacy and autonomy would be affirmed, at the same time individuals would become more aware of being part of a group with inherent responsibilities.

Communities would integrate leisure, education and work in a person-oriented fashion through participatory decision-making and team approaches to organization. Stereotyping whether by race, national group or gender would decline as everyone worked together to create a better community. As individual communities became more self-reliant and self-sufficient, they would act in concert with others on common concerns. There would be a movement toward a balanced global economy and distribution of wealth, the goal of which would be social justice for all. Instead of strict division of labor, hierarchical lines of authority and bureaucratic control, there would be a tendency towards teamwork, participatory decision-making and more horizontal forms of organization.

To attain the preferred future, it will be necessary to examine the values which guide human actions. New human, social and environmental problems which have resulted from science and technology will require new ethical procedures and values for resolution. The values that have been emphasized by our current way of living exploit the environment for economic gain with little regard for human consequences. Resources for a directional shift in values could come from our own multicultural and pluralistic society. In addition, the study of the humanities could bring us to an understanding of values more conducive to the betterment of the human condition.

Flexibility and adaptability will be required to realize a preferred future. Although uncertainty can be minimized by planning and managing change, some uncertainty and ambiguity cannot be totally eliminated. Therefore, individuals will need to learn to tolerate uncertainty as they pursue quality of life rather than quantity.

Implications for the Future of Secondary Education

Secondary education must be relevant to the lives of students. It must maximize the development of knowledge, skills, values and attitudes that will permit youth to be major agents in creating their

own future lives and in participating with others in the attainment of a preferred future.

Otherwise, the natural developmental search for meaning to life experienced during adolescence, and the perceived lack of relevance of education to their personal needs, will augment the alienation, lack of authenticity and control which individuals feel in respect to their own lives today. A future in which our young people cannot participate with a sense of ownership and personal meaning will serve only to augment the present rates of mental disorder and suicide. The prospect of increased complexity, uncertainty, and ambiguity in an expanding technological world with new social and personal issues underscores the necessity to focus on individual autonomy. Therefore, individuality must be recognized and strengthened while, at the same time, individuals become more aware of being part of a collectivity with inherent responsibilities.

The ideals and human needs of the preferred image of the future must be examined to identify the key concepts, skills and values which will act as guides in improving secondary education. The suggestions which came from the team of educators included an understanding of global interrelationships and the influence and control on society of political and economic structures. In addition, personal development, an understanding of the application of technology, and an appreciation of the role of science were emphasized. (See Appendix B.)

Futures literature is potential content for secondary education. It should be relevant, consisting of knowledge that will be of most worth to the student. A primary focus for adolescents would be an integrated approach to physical, emotional and psychological health: physical activity, nutrition, knowledge of human development and sexuality, knowledge of one's own needs, interests, aspirations, and interpersonal skills. Life, leisure and job skills including opportunities to create employment through cooperative entrepreneurship, public service and avocational pursuits would be a part of secondary education.

To the traditional basics of communication and computational skills would be added the skills of computer and electronic media for disseminating, communicating and gaining access to knowledge and information, setting up networks and lifelong access to learning. Another curricular element would focus on various cultural groups to foster understanding and appreciation of diverse ways of living, including the learning of other languages. In addition to the study of the social and economic dimensions of society, topics of global interdepedence and environmental stewardship, the effects of science and technology on society as well as ethical issues involved would be suitable. The curriculum should provide, therefore, a balanced and integrated study of the humanities, social sciences and science and technology. Underlying all of these and integrated with the curriculum would be the moral, ethical and spiritual values which guide and

inform human lives and enable students to develop a personal philosophy of life.

Formulation of policy for secondary education must take into account the general and personal needs of the adolescent learner. The nature of the adolescent requires that learning provide significant opportunities for involvement in concrete experiences. In order to build a sense of identity and a personal value system, students should be given the opportunity to make the decisions and choices of which they are capable and for which they are ready. If learners are to become participatory, then students must have the opportunity to integrate within their learning experiences thought and action, theory and practice. They must be encouraged to take as much responsibility as possible for learning, including its nature and design.

The development of a sense of self-worth is enhanced by service to others. This suggests that opportunities for such service within the community should constitute a significant part of secondary education.

The secondary school curriculum would need revision to accommodate these elements. Content might be discarded or reorganized to integrate knowledge into a more compact structure. These curricular changes would require a gradual approach and therefore, short, medium and long-term stages of evolution may be necessary.

The curriculum structure needs to remain flexible and adaptable. Simplification of curriculum could be achieved by introducing core and elective components within each course. Some areas, previously a part of the school curriculum, could be provided by other community agencies.

Multiple routes would be available for the initiation of the young into our society. There should be sufficient flexibility in secondary education to take account of students' needs, especially following junior high school, to work or pursue other activities prior to resuming studies. Alternative learning places and experiences would be considered equally valid and appropriate. This would be in accord with the acceptance of a lifelong learning concept and the need for adults to return to school for specific learning purposes. In addition, it would allow varying program content and structures for the junior and senior high divisions with consideration for special program structures for young adults in Grade 12, because of the differences of their needs compared to early and middle adolescents.

Creative and flexible programming would be utilized to meet the needs of special groups of students, the handicapped, the gifted, linguistic groups, and students in isolated regions. Some of the means available would be optional courses with modular structures, community experiences, alternative routes to fulfill graduation requirements, computer-assisted instruction, and distance education. Because of the availability of diverse technologies such as computers, two-way video, teleconferencing, distance education could be used for

remote or rural schools lacking facilities or for sharing of teaching and other resources.

There is a need for facilitating a two-way interaction between the school and community for mutual benefit. The school can provide only a part of secondary education, as diverse influences in the lives of the young are more persuasive than ever. Nor can the secondary school remain in isolation from social and technological changes which are thrust upon individuals and communities. Schools could render a valuable service by assisting students to assess critically innovations relative to improving the human condition. Therefore, unique and specialized institutions would continue to exist but they would be complementary to, rather than an alternative for, education in the community or the workplace.

What is clear is that we need an integrated and community-based approach to education, where responsibilities are shared by various governmental and community structures along with parents and students. Recent research has indicated that community-based approaches to change are likely to be more successful.

A policy strategy that emerged from the *Educational Implications of the Future* study is the need to integrate secondary education with the rest of society. After six years of school, secondary education school-age children need something more to look forward to than another six years of school. This is particularly so today when they increasingly realize that meaningful employment does not necessarily lie at the end of school nor even at the end of several more years of higher education. Adolescents are old enough to make a meaningful contribution to society and it is to their benefit to be allowed to do so. Our educational system should provide them with this opportunity. If we understand and believe that education is a lifelong process, then we do not need to crowd an undue proportion of learning into the teenage years.

Education must necessarily play a significant role in assisting our young people to participate in creating and reaching the preferred future. The suggestions and findings of this project are meant to be treated as the beginning of a process of continuous policy discussion and elaboration, involving all segments of society concerned with the purpose and achievements of secondary education.

Secondary schools should be invited to participate in elaborating policy through various developmental projects which they would plan within an accepted future framework, to meet their needs. Schools and communities selected to participate would form a network to exchange information and to consider common issues and problems in their approach to future education. A coherent statement of purpose, responsibility and function is needed to undergird and unite all the separate elements of secondary education into a guiding force for action.

Significant changes in secondary education are needed to provide a flexible framework for open and evolving policies in accordance with

the desired future suggested in this report. Because people and institutions need time to develop and grow, change can be accomplished gradually, taking into account local community, school and classroom realities. The focus of any policy development should be to develop strategies that enable and encourage all groups to participate in and to support proposed improvements and changes.

PART VI

The ultimate aim of education is to develop the abilities of individuals in order that they might fulfill their personal aspirations while making a positive contribution to society. (Junior-Senior High School Handbook, 1984-85, p. vi.)

Efforts to ascertain ways to fulfill this ultimate aim of education for Albertans were evident from the papers which were included in this summary.

Dr. Nancy Sheehan's paper revealed that throughout the history of Alberta, there have been frequent efforts to make secondary education more responsive to the needs of society and of students. However, in spite of enormous changes, from catering to the academic elite to preparing a broad spectrum of students for education, work and life in a complex society, the academic role of the school has remained central and resistant to change.

Dr. John Mitchell's study indicated that adolescents of today possess a greater range of information but it is doubtful that their general thinking ability and their powers of intellect are more advanced than in the teenagers of earlier decades. He delineated the characteristics and needs of adolescents, maintaining that adolescent needs are those which integrate the diverse elements of our human nature in such a way that a person can be counted on to contribute to the requirements of society while maintaining purpose and direction within self. Only when human beings contribute to the satisfaction of the needs of others can they satisfy their own needs.

The comparative study of secondary education in various countries and American states by Dr. Robert F. Lawson revealed an increase in diversity of programming, as well as school-community cooperation in an effort to respond to the needs of their societies. Reforms in these areas tend to affirm the intellectual purpose of secondary education while they attempt to reach and retain more youth. Lawson recommended that the process of reform must be continual.

The need for ongoing change, flexibility and participatory decision-making on the part of educators, school and all sections of the community were affirmed in the work of Dr. Richard Butt and his *Educational Implications of the Future* project team. Dr. Butt's report addressed the conditions necessary for successful policy formulation for secondary education and attempted to map out the terrain that might be engaged by the policy development process. It produced an

example of a desirable future, as well as the values and skills needed for living in that future (Appendix B).

The suggestions for the future of secondary education contained in the studies commissioned for the Secondary Education Review can be summarized as follows:

1. Flexible and gradual approach to change involving participatory decision-making by all groups.
2. Consideration of adolescent characteristics and the needs of today's secondary students as they prepare for the world of the future.
3. School-community cooperation and integration.
4. Multiple routes of initiation into society.
5. Continual and dynamic review and reform.

APPENDIX

A

A. Studies Commissioned for the Secondary Education Review

Butt, Richard, *Pioneering the Future: Educational Implications and Policy Directions for Alberta Secondary Schools.* University of Lethbridge, July, 1984.

This report analyzes and synthesizes the educational implications of the information presented in the futures study by L.J. D'Amore & Associates and is based upon the following position papers commissioned for an Educational Implications of Images of the Future Workshop held in Edmonton in June, 1984:

Berghofer, Desmond, *Enlisting a Futures Perspective in the Review of Secondary Education.*

Bevan, M., *Educational Implications of "Images of the Future".*

Butt, Richard, *The Educational Implications of Images of the Future: Policy Options for Guiding the Reformation of Secondary Education in Alberta.*

Byrne, T.C., *Images of the Future.*

Dale, Jack, *1984 and Beyond: A New Paradigm.*

Eyford, Glen, *Educational Implications of the Future — "Images of the Future".*

Fritz, John, *Alberta Education for the Future — What Form, What Prospects?*

Henchey, Norman, *Images of the Future, Secondary Education, and Alberta.*

Levasseur-Ouimet, France, *Educational Implications of Images of the Future: From Reality to Vision.*

Therrien, Susan, *Today for Tomorrow: Rethinking School in Alberta.*

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Lawson, R.F., and Stevenson, Barbara, *Comparative Studies Project.* University of Calgary, June, 1984.

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Part II — Interpretation Report.

Lloyd, W. Michael, *Secondary Education Programs Review: Summary of Policy Recommendations and Identification of Issues According to Briefs From Groups/Organizations.* July, 1984.

Mitchell, John J., *The Alberta Secondary Student: Some General Growth Profiles.* University of Alberta, June, 1984.

McEwen, Nelly, *The Response of Albertans to the Secondary Program Review Questionnaire.* Second Language Services, June, 1984.

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Early School Leavers in Northern Alberta. Northern Alberta Development Council. June, 1984.

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APPENDIX

B

Major Characteristics of A Desirable Future	Examples of Knowledge, Skills and Attitudes Necessary For Living in a Desirable Future
Application of scientific and technological innovations to enhance life.	Appreciation and respect for the preservation of the environment and the ethical use of scientific and technological advances.
Planned growth in information and communications networks.	Higher cognitive skills, such as critical thinking and interpretive skills, information acquisition and retrieval skills; communication skills through mastery of language; the ability to "learn how to learn" and to cooperate with others.
Greater participation of the individual in the community.	The ability to cooperate and share, develop a sense of service, become more involved in the community and engage in participatory decision-making with greater emphasis on the future.
Awareness of the inter-relatedness of global problems and local action.	Recognition of the need for service, cooperation, sharing and stewardship; awareness of global issues and the contribution of local activity to the resolution of global problems.
Greater respect for and appreciation of our cultural diversity.	Awareness of diversity, tolerance and understandiang of all members of a multicultural/pluralistic society.
Increasing awareness of the importance of spiritual/ moral dimension of life.	The ability to analyze critically current societal values and to develop a personal value system consistent with a pluralistic society.
Lifestyles that integrate work, leisure and continuing education.	The ability to sense problems, conduct research, be innovative, and to participate in shaping the future and meeting the challenges it will present.

Major Characteristics of A Desirable Future	Examples of Knowledge, Skills and Attitudes Necessary For Living in a Desirable Future
Greater awareness of current social and economic conditions.	Appreciation of the need for revised organizational structures and procedures based upon democratic principles, including significant individual and local participatory decision-making.
Tolerance for change and uncertainty in daily living.	Ability to plan for the future, to cope with ambiguity and uncertainty and to develop personal values to guide decision-making.
Pursuit of quality and excellence in daily living.	The maximization of unique talents, initiative, and creativity in the pursuit of excellence to enhance personal and societal goals.